

NOAA In Your State

Alabama

NOAA is an agency that enriches life through science. Our reach goes from the surface of the sun to the depths of the ocean floor as we work to keep citizens informed of the changing environment around them. From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration and supporting marine commerce, NOAA's products and services support economic vitality and affect more than one-third of America's gross domestic product. NOAA's dedicated scientists use cutting-edge research and high-tech instrumentation to provide citizens, planners, emergency managers and other decision makers with reliable information they need when they need it.

The following is a summary of NOAA facilities, staff, programs, or activities based in, or focused on, your state or territory: Starting with highlights, then by [congressional districts and cities or towns](#), [coastal programs](#), and then [statewide programs](#).

Highlights of NOAA in Alabama

Weeks Bay National Estuarine Research Reserve	Fairhope	AL-1
OR&R Gulf of Mexico Disaster Response Center	Mobile	AL-1
Science On a Sphere® at GulfQuest National Maritime Museum of the Gulf of Mexico	Mobile	AL-1
National Water Center	Tuscaloosa	AL-7

The state of Alabama also has three Weather Forecasting Offices, one Regional Office, two Science on a Sphere® exhibitions, and one National Estuarine Research Reserves.

Weather Forecast Offices

Mobile AL-1
Huntsville AL-5
Birmingham AL-6

National Weather Service (NWS) Weather Forecast Offices (WFO) are staffed 24/7/365 and provide weather, water, and climate forecasts and warnings to residents of Alabama. There are 122 WFOs nationwide of which three are in Alabama. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, hurricanes, winter storms, floods, and heat waves to the general public, media, emergency management and law enforcement officials, the aviation and marine communities, agricultural interests, businesses, and others. Information is disseminated in many ways, including wireless emergency alerts, social media, weather.gov, and NOAA Weather Radio All Hazards. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs that strengthen working relationships with local partners in emergency management, government, the media and academic communities. Forecasters provide Impact-based Decision Support Services (IDSS), both remotely and on-site during critical emergencies such as wildfires, floods and chemical spills, and major recovery efforts. To gather data for forecasting and other purposes, NWS WFO staff monitor, maintain and use Automated Surface Observing Stations and Doppler Weather Radar. In addition to the WFOs, NWS operates specialized national prediction centers and regional headquarters throughout the U.S. for a total of 168 operational units. Over 85% of NWS' workforce is in the field. For current Alabama weather, visit www.weather.gov and, on the national map, click on the relevant county or district.

Science On a Sphere®

Mobile AL-1
Birmingham AL-7

Science On a Sphere (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere, which is used to explain in a way that is simultaneously intuitive and captivating what are sometimes complex environmental processes. They are located at the GulfQuest National Maritime Museum of the Gulf of Mexico in Mobile and McWane Science Center in Birmingham.

AL-1

Fairhope

Office of Oceanic and Atmospheric Research (OAR) - U.S. Climate Reference Network

The US Climate Reference Network (USCRN) is an operationally viable research network of more than 138 climate stations that are deployed nationwide. Data from the USCRN are used in various climate monitoring activities and for placing current climate anomalies into an historical perspective. The USCRN provides the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). ARL/ATDD manage the USCRN in partnership with NOAA's NESDIS/NCEI.

National Ocean Service (NOS) - [Weeks Bay National Estuarine Research Reserve](#)

The National Estuarine Research Reserve System is a network of protected areas focused on long-term research, monitoring, stewardship, education, and training. NOAA's Office for Coastal Management provides funding and national guidance, and each site is managed on a daily basis by a lead state agency or university with input from local partners. The 9,317 acre Weeks Bay Reserve was designated in 1986 and is managed by the Alabama Department of Conservation and Natural Resources. Located between the major metropolitan areas of Mobile, AL and Pensacola, FL, the reserve consists of tidal and forested wetlands within the greater Mobile Bay estuarine system along the northern Gulf of Mexico, and supports numerous rare and endangered species.

National Ocean Service (NOS) – [Margaret A. Davidson Graduate Fellowship](#)

The Margaret A. Davidson Graduate Fellowship program funds graduate student research and professional development opportunities within the National Estuarine Research Reserve System. The program supports collaborative research addressing local management challenges that may influence future policy and management strategies. The Davidson Fellow at Weeks Bay National Estuarine Research Reserve will focus their research on linking changes in hydrology, climate, and nutrient loading to eutrophication in Weeks Bay.

[Mobile](#)

Office of Oceanic and Atmospheric Research (OAR)- [The Estuarium at the Dauphin Island Sea Lab](#)

The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension outreach, and education. Sea Grant forms a national network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam. In Mobile, Sea Grant operates The Estuarium at the Dauphin Island Sea Lab. Additionally, Sea Grant educators are based at the Mobile County Environmental Studies Center, and Sea Grant administrative offices are based in Mobile as well.

National Marine Fisheries Service (NMFS) - [Fishery Statistics Office](#)

Field agents serve as the principle data collection agent for marine fisheries throughout the Southeast US (NC-TX). They implement and coordinate surveys involving the collection of fishery related data from the public. Responsibilities and functions are to develop, implement, operate, and manage an integrated fishery statistical data acquisition program for research and fishery management. In Alabama, a field agent is stationed in Mobile.

National Ocean Service (NOS) - [Mobile Bay Storm Surge Monitoring Network](#)

NOAA's Center for Operational Oceanographic Products and Services partnered with Mobile County Commission, the Alabama Department of Transportation and the National Weather Service to install five microwave sensors at various locations throughout Mobile Bay. This is the first time NOAA has used this type of sensor, which is designed to withstand heavy storm-water levels while providing real-time storm surge data to Mobile County's emergency managers, the NWS Weather Forecast Office there, and others.

National Ocean Service (NOS) – OR&R [Gulf of Mexico Disaster Response Center](#)

The Gulf of Mexico Disaster Response Center (DRC), delivers state of the art science and information to emergency managers and other critical stakeholders to assist them in protecting and restoring the Gulf's coasts, communities, and economies. The DRC, located in Mobile, builds a collaborative environment for preparedness, response, recovery, and resiliency efforts by offering the Science of Oil Spills, Science of Chemical Releases, and Science of Coastal Natural Disasters trainings annually for responders in the Gulf and across the country. This hardened facility is built to withstand a Cat-5 storm and is home to staff from several NOAA programs and provides a large multifunction space for partners to conduct trainings, meetings, drills, and emergency response operations.

National Ocean Service (NOS) - [OR&R Regional Preparedness Coordinator](#)

The Regional Preparedness Coordinator is a National Ocean Service (NOS) Disaster Preparedness Program (DPP) employee that resides in a region and serves as a liaison between NOS and its federal, state, and local disaster preparedness and emergency response partners. DPP has a Regional Preparedness Coordinator stationed in Mobile, Alabama, serving the Gulf of Mexico region – Texas, Louisiana, Mississippi, and Alabama. The DPP supports NOS, and federal, state, and local partners in their ability to assess risks and respond quickly and effectively to natural disasters and pollution events. The DPP provides a breadth of preparedness, response, and recovery services to allow NOS and our partners move through the emergency management cycle efficiently, safely, and effectively including planning, training, exercises, response coordination, continuous improvement, and long-term recovery.

NOAA Marine Debris Program (MDP)

The NOAA Marine Debris Program (MDP) supports national and international efforts to research, prevent, and reduce the impacts of marine debris. The MDP Gulf of Mexico Regional Coordinator, based in Mobile, supports coordination efforts with regional stakeholders, provides support to grant-funded projects, tracks progress of projects, and conducts regional marine debris outreach to local audiences.

National Weather Service (NWS) – [Weather Forecast Office](#)- See [Page 2](#) for details.

NOAA Office of Education — [Environmental Literacy Program](#)

NOAA's Environmental Literacy Program (ELP), administered by the Office of Education, provides grants and in-kind support to advance NOAA's mission through formal (K-12) and informal education. In Alabama, ELP supports the GulfQuest Maritime Museum of the Gulf of Mexico (Mobile), which has a permanent exhibit featuring NOAA's Science On a Sphere (SOS) and is a member of NOAA's SOS Users Collaborative Network (SOS Network). The SOS Network connects over 150 science education institutions worldwide to the latest NOAA data as part of a focused effort to increase environmental literacy at all ages. ELP supports the Dauphin Island Sea Lab (Mobile), a member of the Coastal Ecosystem Learning Center (CELC) Network, which is a consortium of 25 aquariums and marine science education centers working together to engage the public in protecting coastal and marine ecosystems.

Office of Oceanic and Atmospheric Research (OAR) - [Science On a Sphere® at GulfQuest National Maritime Museum of the Gulf of Mexico](#) - See [Page 2](#) for details.

[AL-4](#)

[Gadsden](#)

Office of Oceanic and Atmospheric Research (OAR) - [U.S. Climate Reference Network](#)

The US Climate Reference Network (USCRN) is an operationally viable research network of more than 138 climate stations that are deployed nationwide. Data from the USCRN are used in various climate monitoring activities and for placing current climate anomalies into an historical perspective. The USCRN provides the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). ARL/ATDD manage the USCRN in partnership with NOAA's NESDIS/NCEI.

[AL-5](#)

[Huntsville](#)

National Weather Service (NWS) – [Weather Forecast Office](#)- See [Page 2](#) for details.

Office of Oceanic and Atmospheric Research - [Ozone Measurements](#)

NOAA's Earth System Research Laboratory Global Monitoring Laboratory(ESRL/GML) conducts long-term monitoring of stratospheric ozone with balloons. Stratospheric ozone measurements provide data relevant to: surface pollution events, lower and upper atmosphere mixing dynamics, boundary layer stability, ozone trend studies (vertical distribution), and temperature and pressure profiles.

AL-6

Birmingham

National Weather Service (NWS) – [Weather Forecast Office](#)- See [Page 2](#) for details.

AL-7

Birmingham

Office of Oceanic and Atmospheric Research (OAR) - [Science On a Sphere® at McWane Science Center](#)- See [Page 2](#) for details.

NOAA Office of Education — [Environmental Literacy Program](#)

NOAA's Environmental Literacy Program (ELP), administered by the Office of Education, provides grants and in-kind support to advance NOAA's mission through formal (K-12) and informal education. In Alabama, ELP supports the McWane Science Center (Jefferson), which has a permanent exhibit featuring NOAA's Science On a Sphere (SOS) and is a member of NOAA's SOS Users Collaborative Network (SOS Network). The SOS Network connects over 150 science education institutions worldwide to the latest NOAA data as part of a focused effort to increase environmental literacy at all ages.

Selma

Office of Oceanic and Atmospheric Research (OAR) - [U.S. Climate Reference Network](#)

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Tuscaloosa

National Weather Service (NWS) - [National Water Center](#)

Opened in 2015 and located on the campus of the University of Alabama in Tuscaloosa, the NWS National Water Center (NWC) is the first national center for water prediction operations in the U.S. The NWC also supports research and collaboration across the federal water science and management agencies, including the U.S. Geological Survey (USGS), the U.S. Army Corps of Engineers, and the Federal Emergency Management Agency (FEMA). The NWC features a water resources forecasting operations center, an applied water resources research and development center, a proving ground for transitioning research into operations, a geo-intelligence laboratory and an airborne snow and soil moisture observation analysis facility. In addition to NWS employees, the NWC hosts staff from USGS, FEMA and academic institutions.

NOAA Commissioned Officer Corps (NOAA Corps) - [Operations Officer, National Water Center](#)

The NOAA Commissioned Officer Corps stations an officer at the National Water Center in support of the Office of Water Protection (OWP). This officer serves as the Program Manager for a variety of OWP projects, such as the Airborne Snow and Soil Moisture Survey Program, as well as coordinates resources and procurement for the program. In addition, the officer manages a host of other administrative and financial management responsibilities in tandem with public outreach responsibilities, engaging the local community and collaborating with the University of Alabama.

Coastal

National Marine Fisheries Service (NMFS) - [Deep-Sea Coral Research and Technology Program](#)

NOAA's Deep Sea Coral Research and Technology Program is the only federal program dedicated to mapping, characterizing, and understanding deep-sea coral ecosystems, and sharing the information needed to conserve these habitats. The Program -- called for in the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act and within the Office of Habitat Conservation -- is working with other NOAA offices and external partners to conduct fieldwork to study the distribution, abundance, and diversity of deep sea corals and sponges. Since 2009, more than 42,500 square miles of seafloor have been mapped and surveyed for deep-sea coral habitats from Florida to Maine, in Alaska and the West Coast, and in Hawaii and the Marianas Trench.

National Ocean Service (NOS) - [Mobile Bay PORTS®](#)

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community around Mobile Bay at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time data are available for water levels data from eight stations, currents from two stations and meteorological data from six stations. At two of those six stations, visibility (fog) observations are also monitored.

National Ocean Service (NOS) - [National Water Level Observation Network](#)

NOS operates two long-term continuously operating tide stations in the state of Alabama, which provide data and information on tidal datums and relative sea level trends, and are capable of producing real-time data for storm surge warning. These stations are located at Dauphin Island and Mobile State Docks. Each station is associated with a set of tidal benchmarks installed in the ground that is used to reference the height of the water levels and helps connect the water level to land.

National Ocean Service (NOS) - [Mussel Watch Program](#)

Mussel Watch sites in Alabama were sampled pre- & post-oiling in response to the Deepwater Horizon (DWH) incident. Sites were sampled for contaminant analysis (PAHs and trace elements) of oyster tissue and sediments, plus benthic infaunal analysis. Contaminant data are being used to determine the impact of the DWH event on seafood safety.

National Ocean Service (NOS) - [Phytoplankton Monitoring Network](#)

The Phytoplankton Monitoring Network is a research-based volunteer program educating the public on Harmful Algal Blooms (HABs). Volunteers serve as data collectors for marine and freshwater algae blooms at more than 250 coastal sites in the U.S. and Caribbean. Monitoring is conducted at least twice a month, year-round, measuring salinity, water temperature and collecting phytoplankton samples using a plankton net. Volunteers include middle and high schools, colleges and universities, aquariums, state and national parks, national estuarine research reserves, national marine sanctuaries, museums, non-profit organizations, master naturalists, and individuals. Data collected helps NOAA researchers predict when and where HABs occur. Accurate predictions and event monitoring can assist state and federal agencies to issue timely warnings about shellfish consumption and other public health worries.

National Ocean Service (NOS) – [National Coastal Zone Management Program](#)

Through a unique federal-state partnership, NOAA's Office for Coastal Management works with the Alabama Department of Conservation and Natural Resources and Department of Environmental Management to implement the National Coastal Zone Management Program in Alabama. NOAA provides the state coastal management program with financial

and technical assistance to further the goals of the Coastal Zone Management Act and ensure coastal waters and lands are used in a balanced way to support jobs, reduce use conflicts, and sustain natural resources.

National Ocean Service (NOS) – [Digital Coast](#)

The Digital Coast is a focused information resource developed to meet the unique needs of coastal communities. Developed and maintained by NOAA's Office for Coastal Management, content comes from hundreds of organizations, including federal, state, and local agencies, plus private sector and non-profit contributors. The Digital Coast website provides not only site-specific coastal data, but also related the tools, training, and information needed to make these data useful for coastal decision makers.

National Ocean Service (NOS) and National Marine Fisheries Service (NMFS) - [Gulf of Mexico Alliance](#)

Staff members from NOAA's Office for Coastal Management and NMFS SERO's' Habitat Conservation Division are active in the Gulf of Mexico Alliance (GOMA). The Gulf of Mexico Alliance is a Regional Ocean Partnership working to sustain the resources of the Gulf of Mexico. Led by the five Gulf States, the broad partner network includes federal agencies, academic organizations, businesses, and other non-profits in the region. GOMA's goal is to significantly increase regional collaboration to enhance the environmental and economic health of the Gulf of Mexico.

National Ocean Service (NOS) - [Coastal and Estuarine Land Conservation Program](#)

The Coastal and Estuarine Land Conservation Program brings conservation partners together to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical, or aesthetic values. Subject to availability of funding, the program provides state and local governments with matching funds to purchase coastal and estuarine lands or obtain conservation easements for important lands threatened by development. Since 2002, the program has protected more than 110,000 acres of coastal land nationally, including over 16,000 acres protected as in-kind matching contributions. Five project grants have been completed in Alabama, and these lands are protected in perpetuity.

National Ocean Service (NOS) – [National Coastal Resilience Fund](#)

The National Coastal Resilience Fund is a partnership effort between NOAA and the National Fish and Wildlife Foundation (NFWF) to restore, increase, and strengthen natural infrastructure to protect coastal communities, while also enhancing habitat for fish and wildlife. In Alabama, two projects were funded in FY18.

National Ocean Service (NOS) – [Emergency Coastal Resilience Fund](#)

The Emergency Coastal Resilience Fund is a partnership effort between NOAA and the National Fish and Wildlife Foundation (NFWF) to increase the resilience of coastal communities within areas affected by Hurricanes Florence and Michael, Typhoon Yutu, and the coastal California wildfires in 2018. Alabama received a grant to design and construct a breakwater and a coastal marsh in Mobile Bay on the east side of the Dauphin Island Causeway. This project will create and protect critical coastal marsh habitat and reduce the vulnerability of the only emergency/hurricane evacuation route between the mainland of south Mobile County and Dauphin Island.

National Ocean Service (NOS) - OR&R [Scientific Support Coordinator and Regional Resource Coordinator](#)

NOAA's Office of Response and Restoration (OR&R) brings decades of experience, technical expertise and scientific analysis in response to oil and hazardous chemical spills. Eleven regionally based Scientific Support Coordinators (SSCs) harness the input of a multi-disciplinary team to address issues such as oil slick trajectory forecasting, environmental tradeoffs, best practices, resources at risk, and chemical hazard assessment to reduce risks to coastal habitats and resources. OR&R also helps develop preparedness plans that identify spill response actions with the greatest

environmental benefit and trains hundreds of members of the response community each year on the scientific and technical aspects of spills. The SSC in Alabama is based in Mobile at NOAA's Disaster Response Center.

OR&R identifies and quantifies environmental injury caused by releases of oil and hazardous materials. Our network of Regional Resource Coordinators (RRC's) work on multi-disciplinary scientific, economic, and legal teams with the goal of securing the appropriate amount and type of restoration required to restore injured NOAA trust resources and compensate the public for their lost use. We collaborate with NMFS Restoration Center and NOAA General Council through the Damage Assessment, Remediation, and Restoration Program to ensure the process is efficient, legally defensible and restoration focused.

National Ocean Service (NOS) - OR&R [Gulf of Mexico Environmental Response Management Application](#)

During an emergency, responders and decision-makers need the best available information to protect and restore our coasts from threats like oil and chemical pollution. Gulf of Mexico Environmental Response Management Application (ERMA®) fills that need with both static and real-time data, such as Environmental Sensitivity Index maps, ship locations, weather, and ocean currents, in a centralized, easy-to-use format for environmental responders and decision makers. Gulf of Mexico ERMA was extensively used during the Deepwater Horizon Oil Spill. More recently, data and bookmark map views were created in response to Hurricanes Harvey and Irma.

National Ocean Service (NOS) - OR&R [Marine Debris Projects and Partnerships in Alabama](#)

The NOAA Marine Debris Program (MDP) leads national and international efforts to research, prevent, and reduce the impacts of marine debris. The program supports marine debris removal, education and outreach, and research projects in partnership with state and local agencies, tribes, non-governmental organizations, academia, and industry. The MDP Gulf of Mexico Regional Coordinator, based in Mobile, supports coordination efforts with regional stakeholders, provides support to grant-funded projects, tracks progress of projects, and conducts regional marine debris outreach to local audiences. In Alabama, the MDP is partnering with Mobile Baykeeper to prevent marine debris litter through partnerships with local restaurants, businesses, and government agencies, encouraging them to reduce their waste outputs by educating their clients/customers and reducing single-use plastics, and through public art installations that are engaging, functional, and impactful displays of the problem of marine debris. The MDP is working with Gulf of Mexico stakeholders through the Gulf of Mexico Alliance to implement the Gulf of Mexico Alliance Regional Action Plan, which provides a road map for strategic progress in making the Gulf of Mexico, its coasts, people, and wildlife free from the impacts of marine debris. The MDP is also currently working with state and local governments, and other stakeholders, to maintain and exercise the Alabama Marine Debris Emergency Response Guide.

National Ocean Service (NOS) - [U.S. Integrated Ocean Observing System \(Gulf of Mexico Coastal Ocean Observing System\)](#)

The U.S. Integrated Ocean Observing System, or IOOS®, is a federally and regionally coordinated observing system with 17 interagency and 11 regional partners. The System addresses regional and national needs for coastal, ocean, and Great Lakes data and information. This includes gathering and disseminating regional observations; data management; modeling and analysis; education and outreach; and research and development. The Gulf of Mexico Coastal Ocean Observing System (GCOOS), one of the 11 IOOS regional coastal ocean observing systems, seeks to establish a sustained observing system for the Gulf of Mexico that will provide observations and products needed by users in the region for the purposes of detecting and predicting climate variability and consequences, preserving and restoring healthy marine ecosystems, ensuring human health, managing resources, facilitating safe and efficient marine transportation, enhancing national security, and predicting and mitigating against coastal hazards.

National Ocean Service (NOS) - [Navigation Manager](#)

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in Alabama. They help identify the navigational challenges facing marine transportation in Alabama and provide NOAA's resources and services that promote safe and efficient navigation. Navigation managers are on call to provide expertise and NOAA navigation response coordination in case of severe coastal weather events or other marine emergencies.

National Ocean Service (NOS) - [Navigation Response Team](#)

The Office of Coast Survey (OCS) maintains the nation's nautical charts and publications for U.S. coasts and the Great Lakes. OCS navigation managers are strategically located in U.S. coastal areas to provide regional support to federal and state agencies in order to assist with navigational challenges. The Office of Coast Survey's Navigation Response Branch (NRB) conducts routine and emergency hydrographic surveys; and working with the regional Navigation Managers, navigation response teams (NRT) work around-the-clock after storms to speed the reopening of ports and waterways. During emergency response, the NRTs provide time-sensitive information to the U.S. Coast Guard or port officials, and transmit data to NOAA cartographers for updating the Coast Survey's suite of navigational charts. NRT-Stennis is assigned to Stennis, MS and is able to respond within 24 to 48 hours.

National Ocean Service (NOS) – [NOAA RESTORE Science Program](#)

The mission of NOAA's RESTORE Science Program is to carry out research, observation, and monitoring to support the long-term sustainability of the Gulf of Mexico ecosystem. The Science Program receives 2.5 percent of the Gulf Coast Restoration Trust Fund, which is funded from penalties associated with the Deepwater Horizon Oil Spill. The Science Program uses stakeholder input to design funding competitions that support teams of resource managers and researchers to work collaboratively to address regional needs. The Science Program has an office at the Stennis Space Center.

National Ocean Service (NOS) - Students for [Zero Waste Week](#)

Students are inviting their local communities to "Go Green and Think Blue" by joining them in the annual *Students for Zero Waste Week campaign*. During this campaign led by the Office of National Marine Sanctuaries, students focus on reducing land-based waste in order to protect the health of local marine environments. These young leaders are raising awareness of how single-use plastic and other types of litter affect the health of local watersheds, national marine sanctuaries, and the ocean. In addition, some schools are looking at ways to reduce their energy use on campus with hopes of raising awareness of how the burning of fossil fuels also impacts the health of the ocean.

National Weather Service (NWS) - [Center of Excellence in Marine Technology](#)

The National Weather Service (NWS), through its National Data Buoy Center (NDBC), develops, deploys, operates, and maintains the current national data buoy network of moored and drifting weather buoys and land stations that serve each of the Nation's coastal states and territories. Within this network, 110 of the buoys and 51 of the land stations are maintained directly by NDBC. Located at NASA's Stennis Space Center in Mississippi, supports weather and marine warning and forecast services in real time by providing deep ocean and coastal meteorological and oceanographic observations. These data provide valuable information used by NWS supercomputers to produce computer-generated model forecasts of the atmosphere and climate. NDBC manages the Volunteer Observing Ship program to acquire additional meteorological and oceanographic observations supporting NWS mission requirements. NDBC also supports operational and research programs of NOAA and other national and international organizations.

Statewide

National Marine Fisheries Service (NMFS) - [Restoration Center](#)

The NOAA Restoration Center, within the Office of Habitat Conservation, works with private and public partners locally and nationwide to increase fisheries productivity by restoring coastal habitat. Projects support sustainable fisheries, help recover threatened and endangered species, and reverse damage from disasters like oil spills, ship groundings, and severe storms. Through Community-based Restoration Program projects, more than 1400 acres of fisheries habitat have been restored, rehabilitated, and protected and over 300 miles of streams have been opened to migratory fish since 2000. The local community supported these restoration efforts through the time and effort of over 1,000 volunteers. The NOAA Restoration Center works with the state of Alabama to protect over one and half miles of shoreline as part of the Swift Tract Living Shoreline Deepwater Horizon Early Restoration project. The goal of this project is to reduce shoreline erosion by dampening wave energy and encouraging reestablishment of habitat in the region. The Restoration Center is deeply engaged in the coordination of projects through RESTORE, Natural Resource Damage Assessment, and the Gulf Environmental Benefit Fund as a result of the Deepwater Horizon oil spill. NOAA led the natural resource damage assessment restoration planning for the Deepwater Horizon oil spill. Restoration efforts will focus on 13 restoration types and 7 restoration areas to address a broad range of impacts across the Gulf of Mexico.

National Marine Fisheries Service (NMFS) - [Cooperation with States Program](#) and [Species Recovery Grants](#)

Under the authority of section 6 of the Endangered Species Act, the Cooperation with States Program brings states, NMFS, and other partners together to recover threatened and endangered species. A total of 25 U.S. territories and coastal states, including Alabama, currently participate in this program. Competitive grants are awarded to states through the Species Recovery Grants to States Program to support management, monitoring, research and outreach efforts for species that spend all or a portion of their life cycle in state waters. The funded work is designed to prevent extinctions or reverse the decline of species, and restore ecosystems and their related socioeconomic benefits.

National Marine Fisheries Service (NMFS) - [National Marine Mammal Stranding Network](#) and [John H. Prescott Marine Mammal Rescue Assistance Grant Program](#)

The National Marine Mammal Stranding Network and its trained professionals respond to dead or live marine mammals in distress that are stranded, entangled, out of habitat or otherwise in peril. Our long-standing partnership with the Network provides valuable environmental intelligence, helping NOAA establish links among the health of marine mammals, coastal ecosystems, and coastal communities as well as develop effective conservation programs for marine mammal populations in the wild. There is one stranding network member in the state. NOAA Fisheries funds eligible members of the Stranding Network through the competitive John H. Prescott Marine Mammal Rescue Assistance Grant Program. Although Prescott grants have been awarded to recipients in AL in previous years, no grants were awarded in FY20. Nationwide, 43 competitive grants were awarded for a total of \$3.7 million.

National Marine Fisheries Service (NMFS) - [Sea Turtle Salvage and Stranding Network](#)

The Sea Turtle Stranding and Salvage Network (STSSN) was formally established in 1980 to collect information on and document strandings of marine turtles along the U.S. Gulf of Mexico and Atlantic coasts. The network, which includes federal, state and private partners, encompasses the coastal areas of the eighteen-state region from Maine to Texas, and includes portions of the U.S. Caribbean. Data gathered by the Network helps inform bycatch reduction efforts, monitor factors affecting turtle health, and provide other information needed for sea turtle management and population recovery.

National Marine Fisheries Service (NMFS) - [Southeast Regional Office, Gulf of Mexico Bay Watershed Education and Training Program](#)

The NOAA Bay Watershed Education and Training (B-WET) program is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment. The primary delivery of B-WET is through

competitive funding that promotes Meaningful Watershed Educational Experiences (MWEs). B-WET currently serves seven areas of the country: California, Chesapeake Bay, Great Lakes, Gulf of Mexico, Hawai'i, New England, and the Pacific Northwest. The Gulf of Mexico B-WET program recognizes that knowledge and commitment built from firsthand experience, especially in the context of one's community and culture, is essential for achieving environmental stewardship. Gulf of Mexico B-WET responds to regional education and environmental priorities through local implementation of competitive grant funds. Please see the regional funding opportunity for priorities and eligibility details.

National Marine Fisheries Service (NMFS) - [Southeast Regional Office](#) and [Southeast Fisheries Science Center](#)

NMFS studies, protects and conserves living marine resources to promote healthy, functioning marine ecosystems, afford economic opportunities and enhance the quality of life for the American public. NMFS' Southeast Regional Office (headquartered in Saint Petersburg, FL) and Southeast Fisheries Science Center (headquartered in Miami, FL) are responsible for living marine resources in federal waters of the Gulf of Mexico, South Atlantic, and U.S. Caribbean. Using the authorities provided by the *Magnuson-Stevens Fishery Conservation and Management Act*, *Endangered Species Act*, *Marine Mammal Protection Act* and other federal statutes, the Southeast Regional Office and Southeast Fisheries Science Center partner together to assess and predict the status of fish stocks, marine mammals and sea turtle populations, as well as other protected resources, including coral. Additionally, in collaboration, they develop and ensure compliance with fishery regulations, restore and protect habitat, and recover threatened and endangered species in waters off Alabama and throughout the Southeast Region. The Southeast Regional Office also fosters sustainable [aquaculture](#) in the region, with two Regional Aquaculture Coordinators that act as a liaison between federal and state agencies to assist in permitting and coordination activities, supporting aquaculture outreach and education, and collaborating with industry, academia and other stakeholders on regional marine aquaculture issues. The Southeast Fisheries Science Center develops the scientific information required for fishery resource conservation; fishery development and utilization; habitat conservation; the protection of marine mammals, sea turtles and other protected species; impact analyses and environmental assessments for management plans and/or international negotiations; and pursues research to answer specific needs in areas of population dynamics, fishery economics, fishery engineering, food science, and fishery biology.

National Marine Fisheries Service (NMFS) and National Ocean Service (NOS) - [Damage Assessment, Remediation, and Restoration Program](#)

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) assesses and restores habitat, fisheries, protected species and recreational uses that have been harmed by oil spills, chemical releases, and ship groundings. Working with federal, state, and tribal entities, and responsible parties, we have recovered funding from responsible parties for restoration of critical habitats, fisheries, protected species and recreational uses nationwide. These projects promote recovery of the ecosystem and provide economic benefits from tourism, recreation, green jobs, coastal resiliency, property values and quality of life. In Alabama, the Program is currently working to restore natural resources in cases including the Ciba-Geigy hazardous waste site.

National Marine Fisheries Service (NMFS) - [Office of Law Enforcement](#)

NOAA's Office of Law Enforcement is the only conservation enforcement program (Federal or State) that is exclusively dedicated to Federal fisheries and marine resource enforcement. Its mission is to protect global marine resources by enforcing domestic laws and international treaties and obligations dedicated to protecting wildlife and their natural habitat. Our special agents and enforcement officers ensure compliance with these laws and take enforcement action if there are violations. Additionally, the Cooperative Enforcement Program allows NOAA the ability to leverage the resources and assistance of 27 coastal states and U.S. territorial marine conservation law enforcement agencies in direct support of the Federal enforcement mission. Effective fisheries law enforcement is critical to creating a level playing field for U.S.

fishermen and enabling sustainable fisheries to support vibrant coastal communities. The Office of Law Enforcement's Southeast Division is headquartered in St. Petersburg, Fla., with an Alabama field office in Mobile.

National Ocean Service (NOS) - [Regional Geodetic Advisor](#)

The Regional Geodetic Advisor is a National Ocean Service (NOS) employee that resides in a region and serves as a liaison between the National Geodetic Survey (NGS) and its public, academic and private sector constituents within their assigned region. NGS has a Regional Geodetic Advisor stationed in Jackson, Mississippi serving the Gulf Coast region – Alabama, Florida, Louisiana, and Mississippi. The Geodetic Advisor provides training, guidance and assistance to constituents managing geospatial activities that are tied to the National Spatial Reference System (NSRS), the framework and coordinate system for all positioning activities in the Nation. The Geodetic Advisor serves as a subject matter expert in geodesy and regional geodetic issues, collaborating internally across NOS and NOAA to ensure that all regional geospatial activities are properly referenced to the NSRS.

National Weather Service - [NEXRAD \(WSR-88D\) Systems](#)

NEXRAD is used to warn the people of the United States about dangerous weather and its location. This radar technology allows meteorologists to warn the public to take shelter with more notice than ever before. The NEXRAD network provides significant improvements in severe weather and flash flood warnings, air traffic safety, flow control for air traffic, resource protection at military bases, and management of water, agriculture, forest, and snow removal. NEXRAD radar has a range of up to 250 nautical miles, and can provide information about wind speed and direction, as well as the location, size, and shape of precipitation. There are 159 operational NEXRAD radar systems deployed throughout the United States and overseas, of which five are in Alabama.

National Weather Service (NWS) - [Automated Surface Observing Systems Stations](#)

The Automated Surface Observing Systems (ASOS) program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). ASOS serves as the Nation's primary surface weather observing network. ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. ASOS works non-stop, updating observations every minute, 24 hours a day, every day of the year observing basic weather elements, such as cloud cover, precipitation, wind, sea level pressure, and conditions, such as rain, snow, freezing rain, thunderstorm, and fog. There are 17 ASOS stations in Alabama.

National Weather Service (NWS) - [Cooperative Observer Program Sites](#)

The National Weather Service (NWS) Cooperative Observer Program (COOP) uses the help of more than 10,000 volunteers who take observations on farms, in urban and suburban areas, National Parks, seashores, and mountaintops. The data are representative of where people live, work and play. The COOP was formally created in 1890 under the NWS Organic Act to provide observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes, and to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS. The data are also used by other federal (including the Department of Homeland Security), state and local entities, as well as private companies (such as the energy and insurance industries). In some cases, the data are used to make billions of dollars' worth of decisions. For example, the energy sector uses COOP data to calculate the Heating and Cooling Degree Days which are used to determine individuals' energy bills monthly. There are 154 COOP sites in Alabama.

National Weather Service (NWS) - [NOAA Weather Radio All Hazards Transmitters](#)

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service (NWS) forecast office. NWR broadcasts official NWS warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "All Hazards" radio network, making it the single source for comprehensive weather and emergency information. In conjunction with federal, state, and local emergency managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as AMBER alerts or 911 Telephone outages). Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the NWS. NWR includes 1,100 transmitters covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. There are 21 NWR transmitters in Alabama.

NOAA Office of Education — [Environmental Literacy Program](#)

NOAA's Environmental Literacy Program (ELP), administered by the Office of Education, provides grants and in-kind support to advance NOAA's mission through formal (K-12) and informal education. In Alabama, ELP supports the American Meteorological Society's DataStreame courses for K-12 educators through a grant and in-kind support. These courses use weather, climate, and the ocean as contexts for teaching science and improving understanding about the Earth system.

Office of Oceanic and Atmospheric Research (OAR) - [Mississippi-Alabama Sea Grant College Program](#)

The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension outreach, and education. Sea Grant forms a national network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam. The Mississippi-Alabama Sea Grant Consortium is a federal-state partnership that matches NOAA Sea Grant expertise and resources with state academic institutions. Created in 1972, members of the consortium include Auburn University, Dauphin Island Sea Lab, Jackson State University, Mississippi State University, The University of Alabama, The University of Alabama at Birmingham, the University of Mississippi, The University of Southern Mississippi and the University of South Alabama. The mission of Mississippi-Alabama Sea Grant Consortium is to enhance the sustainable use and conservation of ocean and coastal resources to benefit the economy and environment. The bi-state consortium focuses on healthy coastal ecosystems, sustainable fisheries and aquaculture, resilient communities and economies, and environmental literacy and workforce development. Extension agents are located in Mobile.

Office of Oceanic and Atmospheric Research (OAR) - [449-MHz Wind Profiler with RASS and Surface Meteorology](#)

The NOAA Physical Sciences Laboratory operates and maintains an integrated 449-MHz wind profiler observing system at Courtland, Alabama, in support of the VORTEX-SE field project. Data collected at this site will be used to better understand the atmospheric conditions that lead to severe storms and the sources of rotation for tornadic development.

NOAA In Your State is managed by [NOAA's Office of Legislative and Intergovernmental Affairs](#) and maintained with information provided by NOAA's Line, Corporate, and Staff Offices. Questions about specific programs or offices should be directed to the NOAA Line, Corporate, or Staff Office listed.

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